

Comments on RM-11392

Thank you for the opportunity to comment on RM-11392.

I believe the main impetus behind this petition is the operating characteristics of one mode, PACTOR III. The most common scenario using this mode is for a PACTOR III station operating under local or remote control to call an automatically controlled PACTOR III station. The stations first establish the link using PACTOR I, a relatively narrow-band mode of approximately 500 Hz in occupied bandwidth. The two stations then convert to PACTOR III, a relatively wide-band mode having a maximum occupied bandwidth of approximately 2.4 kHz when the propagation conditions between the two stations are optimum.

This characteristic of PACTOR III is a serious shortcoming because of the “hidden transmitter” effect. Although the interrogating station operating under local or remote control listens on its end before calling the automatically controlled station, the automatically controlled station will typically answer whether the channel on its end is already busy or not. Because of the propagation characteristics of the HF bands, a clear channel at the interrogating station does not insure that the channel is clear on the other end.

A significant number of the reported instances of interference on the HF bands generated by automatically controlled PACTOR III stations must be because the automatically controlled stations either do not have any type of “busy detector” or because the “busy detector” has been turned off. Indeed, there is strong evidence that the owners of the automatically controlled stations in the popular Winlink 2000 network have been “instructed” by the network’s administrator to turn off the built-in busy detector feature! The resulting interference has caused much consternation within the Amateur community. With the increasing use of automatically controlled stations operating PACTOR III and other similar “wide-band” digital modes, this interference will likely only grow unless some reasonable solution can be found. Unfortunately, the Amateur community appears to be unable to find a solution on its own.

I believe the wisest course of action for the Commission to take at this time is to prohibit the use of PACTOR III (or any other similar wide-band mode) by any automatically controlled station unless a “busy detector” scheme is also employed by the automatically controlled station. The busy detector should be reasonably sensitive to the various modes used on the RTTY/data bands such that it will minimize interference to essentially the same degree as that provided by a PACTOR III station operating under local or remote control.

Requiring these automatically controlled stations to use busy detectors certainly appears to be consistent with the rule that each amateur station must be operated in accordance with good engineering and good amateur practice.

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